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B. T. GALLOWAY, Chief of Bureau.

SPECIAL CONTESTS FOR CORN-CLUB WORK.

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SPECIAL CONTESTS FOR CORN-CLUB WORK.¹

INTRODUCTION.

It is a well-established fact that both play and contest interests perform a very important part in the processes of education and have much to do in creating efficiency for man in the equation of social and industrial life.



Fig. 1.—Two Iowa boys discussing the merits of seed ears.

The corn-club work is an important factor in the economy of the farm in directing rural boys to the business of farming as a profitable and noble profession. The way in which the club work takes hold of a boy is well shown in figure 1, and from this enthusiasm greater interest in farm life may develop.

¹This circular is prepared for use in the Northern and Western States, where the boys' corn-club work is supervised by the Office of Farm Management of the Bureau of Plant Industry. This work in the Southern States is supervised by the Office of Farmers' Cooperative Demonstration Work of the Bureau of Plant Industry.

The rules and regulations governing the age, acreage, basis of award, methods of measurement, and general club requirements are the same in all States. The administration of the club work through these two offices is adapted by them in each case to local conditions.

We need the boys for the present efficiency of the farm, and we must have their work, their leadership, and their influence for the future if American agriculture and rural interests are to endure and contribute as they should to human comfort and prosperity.

The purpose of this circular is to suggest lines of interest and instruction in addition to the regular club work, which has to do with the acre yield at a reasonable cost of production. These club contests may well be taken up in connection with the rural and village schools; country, district, and State fairs; short courses, farmers' institutes, educational gatherings, etc., with a view to giving direction and interest as well as important training during the entire year. The club contests will enable both teacher and parent to win the boy for better things in needed education and efficient farm life. Much could be said about the influence of this kind of work upon actual production and land values.

Boys' corn-club work should be constructive and permanent, and in order that it may be so the following lines of contest work are suggested to the club membership. These contests should offer some relaxation from the main line of work and should be practical and recreative as well as instructive.

A FEW OBJECTS OF CLUB CONTESTS.

The following are a few of the objects of corn-club contests:

- (1) To increase members' interest in corn in all of its important phases.
- (2) To secure better seed corn and consequently better yields. (All seed should be returned to the exhibitors.)
- (3) To give industrial activity and practice to club members for the entire year.
- (4) To give members greater interest in club work through combined play and contest methods.
- (5) To furnish profitable diversion to the boys during the otherwise idle hours of playtime and vacation periods. "An ounce of prevention is worth a pound of cure."

PREMIUM LIST SUITABLE FOR AWARDS IN CLUB CONTESTS.

To stimulate interest in the contests the following premiums are suggested:

- (1) Free trips and expenses paid to district and State fairs, educational institutions, summer Chautauquas, etc.
 - (2) Top buggy, saddle, gold watch, automobile, etc.
 - (3) Clear title to one or more acres of land (to encourage land ownership).
 - (4) Farm implements, tools, equipment, etc.
 - (5) Thoroughbred pigs. cattle. horses, mules, pen of chickens.
 - (6) Club emblems, banners, and pennants.
- (7) Manual-training workbench, set of tools, cameras, trunk, leather hand bag, writing desk, etc.
- (8) Poultry equipment, such as incubators, watering and feeding troughs, brooders, fencing, and gates.

- (9) Free tuition to short courses in agricultural and mechanical colleges and regular courses in colleges.
- (10) Canvas tent, camp outfit, canoe, hunting equipment, baseball suit, and suit of clothes.
- (11) Dictionary, encyclopedia, set of agricultural books, special club library, series of books of standard literature.
- (12) Subscriptions to farm journals, magazines, and special periodicals for boys.

Every premium offered for contests and corn-club work should have for its main interest the promotion and encouragement of the regular club work. The premium should represent the greatest need and interest of the corn-club membership; it must teach the broad viewpoint of the club work and encourage both members and leaders to be progressive and constructive in their work, and it should serve to increase the club members' interest and respect for farm life.

Club leaders, county superintendents, teachers, and others interested in promoting agricultural and rural-home interests should lose no opportunity to have club exhibits and interests recognized effectively at county, district, and State fairs. County farmers' institutes, short courses, and teachers' associations are excellent mediums for promoting the club work, and an exhibit of club products, special contests, essays, and general discussions on phases of the work should occupy some place and time during the regular session. Do not wait for an invitation to submit club interests, but proceed at once to make and present your plans to the proper officials, such as the secretary, the president, and the various premium and program committees. Most of these will be glad to recognize the boys and girls in their club interests in every way possible.

Women's clubs, summer Chautauquas, and all business organizations can be easily interested in the local club work and upon tactful solicitation will gladly give moral support and oftentimes financial help.

WHERE TO HOLD THE CONTESTS.

No contest serves its highest purpose unless it is first local. Begin at the rural school, then go to the township, county, district, State, and finally to the national contest events. In this way you carry with you an increasing interest and enthusiasm in the work, and all the time the real producers at home are most conspicuous.

A number of contests are mentioned below, and the methods of conducting them are suggested in the short memorandum for each one. The basis of award may be used to determine the standing of contestants.

When possible, arrange to have a corn-club emblem given to each member who makes a creditable exhibit. These will cost only \$12 a hundred.

FALL CORN CONTESTS.

Instructions in Seed-Corn Selection.

Bear in mind that upon your faithfulness in the selection of seed corn for vitality, quality, and high-yielding value depends much of your success in crop production for the next season. Your work will influence countless others in this most important phase of farm work and economy.

All seed corn should be selected early in the fall, just as soon as the corn is mature and dry enough for seed, and it must be done before the fall freezing begins. Select early matured ears from the carefully selected stalks; if possible, increase your yield by your selection from two-ear stalks. Select the best ear on this ideal mother stalk, or, if two are suitable for seed, select both. Of course, for a few years it will be quite impossible for the club member to secure enough seed corn which will meet the above standard. Have the ideal in mind, however, and select your best corn and get as near to this standard as possible.

Remember that you must have ideals in mind, first, of the mother stalk; second, of the perfect ear; third, of the perfect grain; and all this must conform to the standard which applies to your particular breed of corn.

Every farmer should have a seed-corn breeding plat at the head of his crops, just as he maintains a good male unit at the head of his hog and stock herds. As a club member you can do much to educate the people of our country as to the importance and absolute need of careful seed selection and a well-protected seed plat. Remember to select for vitality, quality, and high production. "Like begets like." The following will furnish you with a brief guide in the matter of selecting seed corn:

- (1) Type of plant:
 - (a) Stalk, without suckers, strong and thick at base; large and welldeveloped roots; ears about four feet from base.
 - (b) Seed ear, large, sound, well shaped, good weight, strong shank. tip turned down. Select early-maturing ears with perfect husks.
 - (c) The grains of corn on the ear should have a large, healthy germ, good color, deep grained, and wide at the apex.
- (2) Storage: Store in a dry place of uniform temperature; test for vitality before planting. No seed of which less than 95 per cent is germinable should be used.
 - (3) Ideal ear for seed and exhibition:
 - (a) Size and color determined by breed type.
 - (b) Sound, mature, good-looking.
 - (e) Cylindrical and must carry diameter well from butt to tip; should taper very slightly from butt to tip.
 - (d) Rows should be straight and compact.
 - (e) Butt and tip well filled; show shank and sign of cob tip.
 - (f) Cob one-half diameter of ear.

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CONTESTS IN THE SELECTION OF SEED CORN.

Give the first, second, third, fourth, and fifth premiums for each of the following:

- (1) The best hand-picked bushel of seed corn (shown in bushel basket).
- (2) The best 10-ear sample.
- (3) The best single ear.
- (4) The best hill of corn, showing stalks, ears, roots, etc.
- (5) The best stalk of corn from which to select seed corn.

BUSHEL CONTEST.

BASIS OF AWARD.

(1)	Trueness	to breed type2	25
(2)	Vitality, r	naturity of corn, and market condition2	25
(3)	Appearance	e of corn. i. e., uniformity of butts, tips, color, size, etc.,	
	as it app	lies to the entire bushel2	25
(4)	Shelling	percentage, shape, size, color, and quality of individual	
	grains (apply "test" to the entire bushel)2	25
			_
	Total	score 10	Ж

TEN-EAR AND SINGLE-EAR SAMPLE CONTESTS.

BASIS OF AWARD.

The basis of award in the bushel contest can be used to advantage in scoring both the 10-ear and single-ear samples, or, better still, follow the score-card instructions submitted by your State college of agriculture and experiment station.

CORN-HILL CONTEST.

The hill must be entire and unbroken at the roots of the plant in order to be eligible.

BASIS OF AWARD.

(1) Number of stalks and ears of corn to the hill	25
(2) Condition of roots and stalks (see stalk standard below)	25
(3) Quality and breed type of corn	25
(4) High-production value of sample hill (based upon yield per acre and	
average weight of corn to hill)	25
_	
Total score	100^{-}

SINGLE-STALK CONTEST.

The object of the single-stalk contest is to teach the primary source of good seed. The exhibit should include the entire plant, stalk, ears, and root system.

BASIS OF AWARD.

(1) Conoral appearance and condition of the stall including weets as

(T)	General appearance and condition of the stark, including roots, ears,	
	and all of its parts	25
(2)	Weight of corn on the stalk	25
(3)	Quality and breed type of the corn	25
(4)	High production; value of the sample stalk	25
	-	
	Total score	100
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STORING SEED CORN.

After selecting the seed corn it should be carefully stored in a place with uniform dryness and temperature. The storeroom should be well ventilated.

Do not allow seed corn to heat, freeze, or to be subject to sudden changes, such as from a dry to a wet or from a cold to a warm atmosphere.

There are a number of economical and efficient methods of storing seed corn, such as the single-twine method and the double-twine method, and by the use of various drying racks, etc. The method used will be selected with reference to its particular fitness to the quantity of seed and the available storage room; also with reference to



Fig. 2.—A seed-corn stringing contest with referee, timekeeper, and contestants on stage.

the kind of storeroom. For more information on this subject,¹ see Farmers' Bulletin 415, entitled "Seed Corn," by C. P. Hartley, and the special circulars on this subject issued by your State agricultural college and experiment station.

SEED-CORN STRINGING CONTEST.

Arrange the contestants in pairs, with two members facing each other on the floor or platform. Have the member to the right handle the string, tie, operate, and hang in place, while the second member feeds the corn from the pile into the stringer. The second member

¹ See also Farmers' Bulletins 229, The Production of Good Seed Corn; 253, The Germination of Seed Corn; 313, Harvesting and Storing Corn; 408, School Exercises in Plant Production; 409, School Lessons on Corn; 414, Corn Cultivation; 415, Seed Corn; 428, Testing Farm Seeds in the Home and in the Rural School; and Circular 95, Bureau of Plant Industry, entitled, "The Seed-Corn Situation."

should take a position on his knees in front of the corn and the first boy, while the first boy stands erect and operates the string. A time-keeper and a referee or a set of three judges should be appointed. Figure 2 shows a seed-corn stringing contest, with contestants, time-keeper, and referee on the stage.

The boys or team who make the highest grade on the three following points are classed as winners:

BASIS OF AWARD.

(1) Stringing the largest number of ears in a given time	40
	30
(3) Having the best work; shown in the condition of the corn as hung in its place	30
Total score1	100

PLOWING CONTEST.

A field area should be provided so that each contestant can plow 10 furrows. The arrangement of plowing should be made convenient for the judges to do their work, so as to leave the plowed ground in shape for the owner to use.

BASIS OF AWARD.

(1)	Skill in managing the team	and plow	30
(2)	Uniformity of depth, width	, and condition of the soil	40
(3)	General appearance of 10	furrows (exterior condition, such as	
	smoothness, freeness from	trash, etc.)	30
		_	
	Total score		100

WINTER CONTESTS.

CORN-JUDGING CONTEST

The judging contest may apply to a 10-ear or single-ear sample, a bushel, a perfect hill, or a single stalk. The regulation score card should be used.

BASIS OF AWARD.

(1)	Time required in judging	20
	Accuracy in the scoring work	30
(3)	Neatness of score card	20
(4)	One-half page description of an ideal sample	30
	Total score	100

CORN BREED AND VARIETY NAMING CONTEST.

The principal object of the breed and variety contest is to have the club members become familiar with the characteristics of standard [Cir. 104]

breeds of corn grown in the corn-club States. This is quite important in connection with the work in seed selection and in the corn-judging contests.

Place 12 or 20 ears of corn, representing as many varieties, on a table or a paper placed on the table. Each contestant is given a pencil and a sheet of paper, with numbers corresponding to the numbers of the ears and with blank spaces for the variety names. He is then permitted to pass by the corn and study it and to enter the number and name of each kind of corn on his paper.

BASIS OF AWARD.

(1) Time required to name the breed and variety	30
(2) Accuracy of names given	40
(3) Writing, spelling, and neatness of paper	30
Total score	100

CORN-RECIPE AND PRODUCTS-NAMING CONTEST.

BASIS OF AWARD.

(1) Constant and the second of	200
(1) Greatest number written or stated in five minutes	30
(2) Accuracy of recipes and named products	40
(3) Spelling, writing, and neatness of paper	30
Total score	100

CORN-PROBLEMS CONTEST.

In like manner contests may be held in (1) proposing the best 10 original problems in arithmetic relating to corn and corn-club work and (2) in solving a set of 10 corn problems.

BASIS OF AWARD.

(1) Accuracy	40
(2) Composition	30
(3) Originality	30
_	
Total score	100

MANUAL-TRAINING CONTESTS.

The following items can be made the subjects of manual-training contests: (1) Making a 10-ear corn tray; (2) a seed-test box; (3) a drying rack; (4) a reproduction in relief of a picture or of some other article made entirely from corn.

BASIS OF AWARD.

(1) Character of work and finish	30
(2) Faithfulness to plan (show plan or drawing)	30
(3) Originality in design	40
_	
Total score	100

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DRAWING CONTESTS.

A drawing of (1) a seed-test box; (2) a seed-drying rack; (3) an ideal corn crib; (4) a plan of an 80-acre farm, showing the location of the cornfield and the seed plat with relation to other crops, farm buildings, etc.; and (5) grains of corn, cross section of grains, etc.

BASIS OF AWARD.

(1)	Accuracy, trueness to object	40
(2)	Neatness	30
(3)	Originality of design	30
	Total score	100

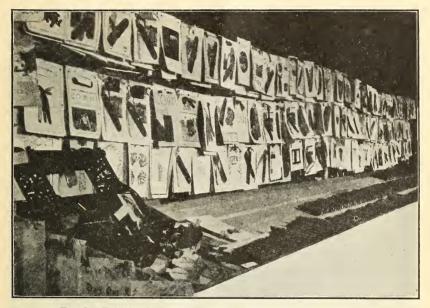


Fig. 3.—Exhibit of a seed-selection and a corn-club booklet contest.

LANGUAGE AND COMPOSITION CONTESTS.

Contests can be held for club members in language work, with a view to teaching them how to express themselves in simple and correct English. The essay should be from 500 to 800 words long and should be in booklet form, 9 by 11 inches, written and illustrated by the club member, as shown in figure 3.

BASIS OF AWARD.

(1)	Composition and punctuation	30
(2)	Subject matter	40
	(a) complete treatment; (b) sequence.	
(3)	Writing, spelling, and neatness	30
	-	
	Total score	100
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SUBJECTS.

- (1) How I Made My Crop of Corn.
- (2) Corn-Club Work as an Education.
- (3) The Value of Careful Seed Selection.
- (4) History of Corn.
- (5) Importance of Testing Seed Corn.

ROPE-TYING CONTEST.

BASIS OF AWARD.

(1)	Time of speed in rope tying (period of five minutes)	30
	Accuracy in tying and naming knots tied	40
		40
(3)	Skill in handling self and rope	30
	_	
	Total score	100

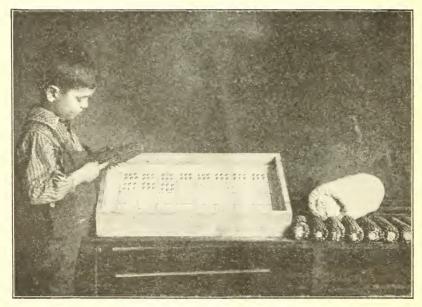


Fig. 4.—A Minnesota club member preparing his seed test.

In like manner hitching, horse-mounting, and soil-type naming contests may be planned and successfully carried out, with the idea of reenforcing the Boys' Corn-Club work with a series of practical and highly useful play contests.

SPRING CONTESTS.

SEED-CORN GERMINATION TEST.

Any one of the common methods and devices for seed testing will be a success if you do the work carefully and follow instructions which apply to the particular method or device. A club member preparing his seed test is shown in figure 4.

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The methods approved by all of our leading corn experts are as follows:

(a) Homemade test-box method; (b) rag-baby tester; (c) commercial testers.

Consult your State experiment station circulars, Farmers' Bulletin 415, and Circular 95 of the Bureau of Plant Industry for further information as to how to make the test.

SEED-CORN TESTING CONTEST.

Premiums may be awarded to club members, rural-school pupils, or club teams who test the largest number of seed ears during the season or in a given time and submit a tabulated report of their tests showing the source of seed, with the percentages of strong, weak, and dead seeds. The award is to be made upon the three following points:

(1) Number of ears tested	40
(2) Condition and accuracy of the report of the test	30
(3) Drawing and explanation of the test box used	30
Total score	100

EXPERIMENT CONTESTS.

The experiment contest should be conducted so as to encourage the study of well-established facts as they apply to corn culture. The test is to see who can make the best experiment on one of the following subjects:

- (1) Capillarity of soils.
- (2) Germination of seed at different depths in glass.
- (3) Use of corn as food.
- (4) Effect of different fertilizing materials on the soil. (Use muddy clay water. Put lime into it to clarify.)
 - (5) Use of a dust mulch for moisture conservation.

BASIS OF AWARD.

(1) Accuracy of the experiment	40
(2) Skill in presenting the experiment	30
(3) Time required and equipment	30
Total score	100

In like manner contests correlated with physiology, spelling, and geography can be easily drawn from club interests.

CLUB CONTESTS IN STANDARDS OF FARM LABOR FOR ALL SEASONS.

The objects of the club contests in standards of farm labor are: (1) To suggest a means by which the child or club member may be taught the value of careful observation as it applies to the cost of different farm operations and what constitutes a day's work; (2) to

furnish the club member and teacher with suggestions as to how resords should be kept and what constitutes a complete record of a farm operation; (3) to give greater interest to the boy in his as well as his father's farming methods; and (4) to furnish authentic farmlabor reports to the United States Department of Agriculture. The following is a summary of the necessary records, and it also explains the contests:

RECORD FOR CONTESTS.1

Contest in keeping the best record of plowing the club acre or the father's field. Estimate on entire plat or field, but do not include disking, cultivating, fertilizing, etc.

(All records	must be	written with	pen and	ink.)
Suggestions	for keepi	ing plowing	records:	,

- (1) Size of club plat or field, length ____ rods; width ____ rods.
- (2) Number of acres in plat or field _____.
- (3) Number of horses used _____.
- (4) Weight of horses ____ pounds.
- (5) Kind of plow used ____; size or width of plow ____; condition of plow ____;
 - (6) Depth of plowing ____ inches; width of furrow ____ inches.
 - (7) Number of acres plowed per day _____.
- (8) Total number of hours and minutes spent in plowing during the day (estimate on actual plowing only) _____.
 - (a) Give time of leaving barn with team in the morning _____.
 - (b) Give time of beginning actual work in plowing _____.
 - (c) Give time of stopping for noon __; time reaching barn __.
 - (d) Give time of starting for field in afternoon __; time begun plowing ____.
 - (e) Estimate total time lost during plowing due to repairs, accident, etc., __.
 - (f) Give time of leaving at night __; time of reaching barn __.
 - (9) Kind of soil, such as loam, clay, sandy, stony, etc., ____.
 - (10) Condition of soil—hard, friable, loamy, etc., _____.
- (11) State whether the field was covered with stalks, sod, stubble, weeds, etc., _____.
 - (12) State the effect of last year's crops on the condition of the land _____.
 - (13) What crops were grown upon this field last year? ____.
- (14) Draw a diagram of your club plat or the field upon which you have reported. (Give dimensions in rods.)

I hereby certify that the above is an accurate and complete report of the plowing operation, and I have answered every question to the best of my knowledge and ability.

Signed,	
D	(Club member.)
Post-office address,	
	(State.)

Record blanks will be furnished upon application to the Department of Agriculture.

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BASIS OF AWARD TO DETERMINE STANDING OF CONTESTANTS.

(1)	Accuracy of record	40
(2)	Neatness of report	20
	Completeness of report	20
(4)	Penmanship of report	20
` ′		
	Total score	100

OTHER FARM-MANAGEMENT CONTESTS.

In like manner contests should be held on the keeping of records or labor reports, on fertilizing, disking, the cultivation of corn, husking corn, seed selection, and in making a germination test. Assign different subjects to different pupils and in the right season for good work.

For additional instructions regarding contests in farm operations and for a supply of record blanks to be used in your centests, address the United States Department of Agriculture, Bureau of Plant Industry, Office of Farm Management, Washington, D. C., and the instructions and supplies of record blanks will be forwarded for your use in the schools.

Approved:

James Wilson, Secretary of Agriculture.

Washington, D. C., September 18, 1912. [Cir. 104]

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